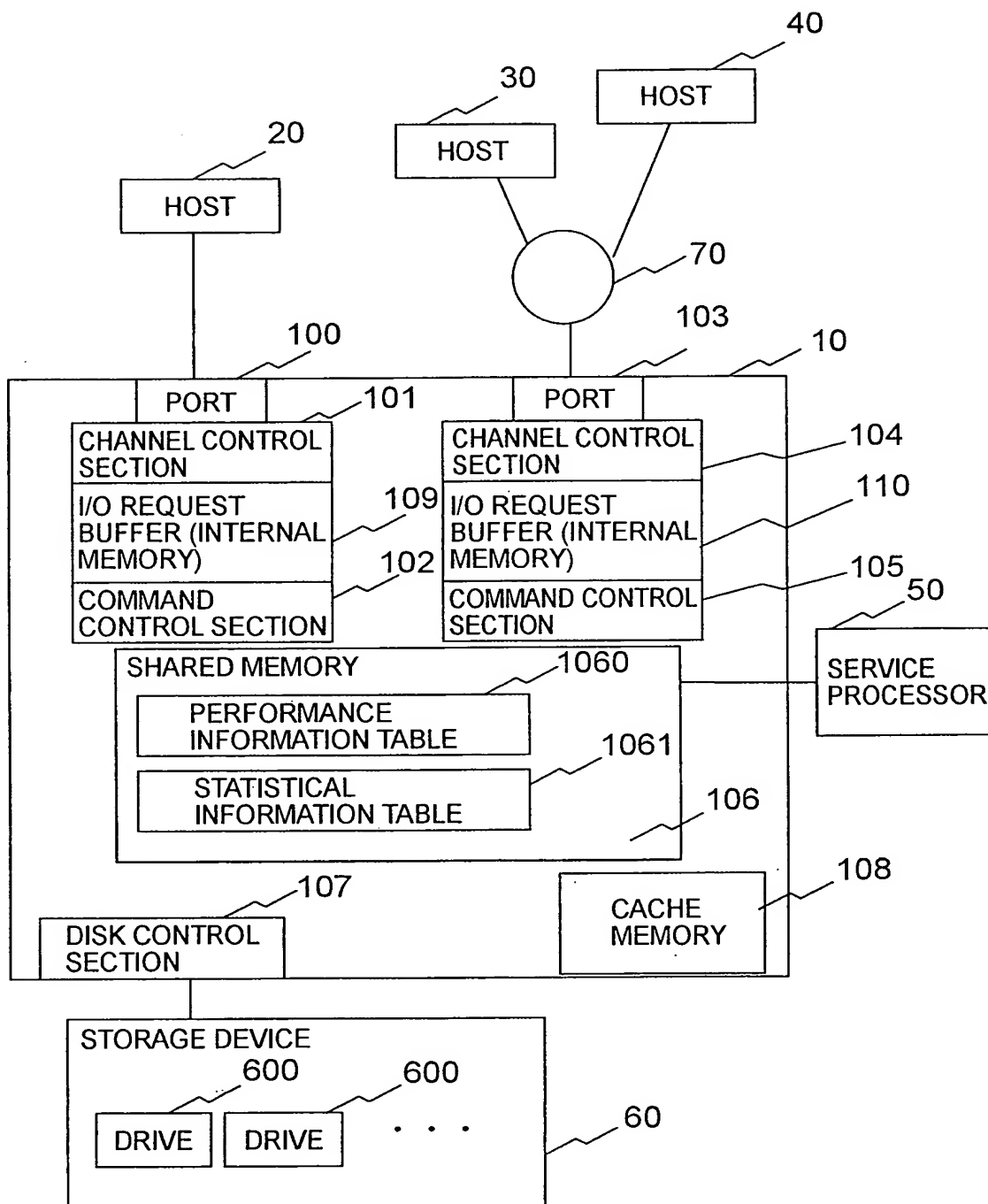


FIG. 1



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FIG. 2

PROCESSING SEQUENCE FOR WRITE I/O REQUEST

WRITE REQUEST: WRITE RECORD 1, RECORD 2, RECORD 3
COMMAND CHAIN: define extent / locate data / write (R1) / write (R2) / write (R3) 70

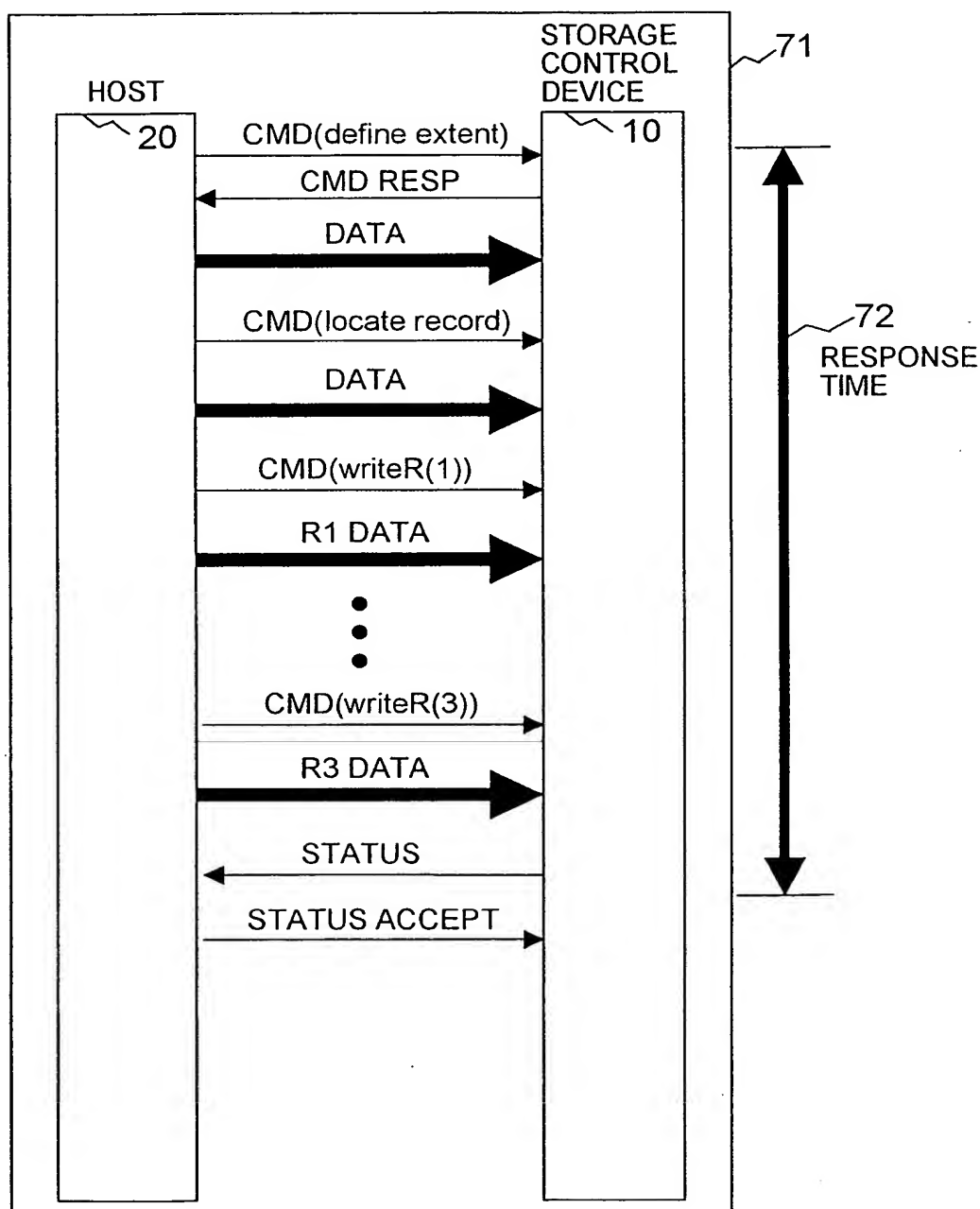
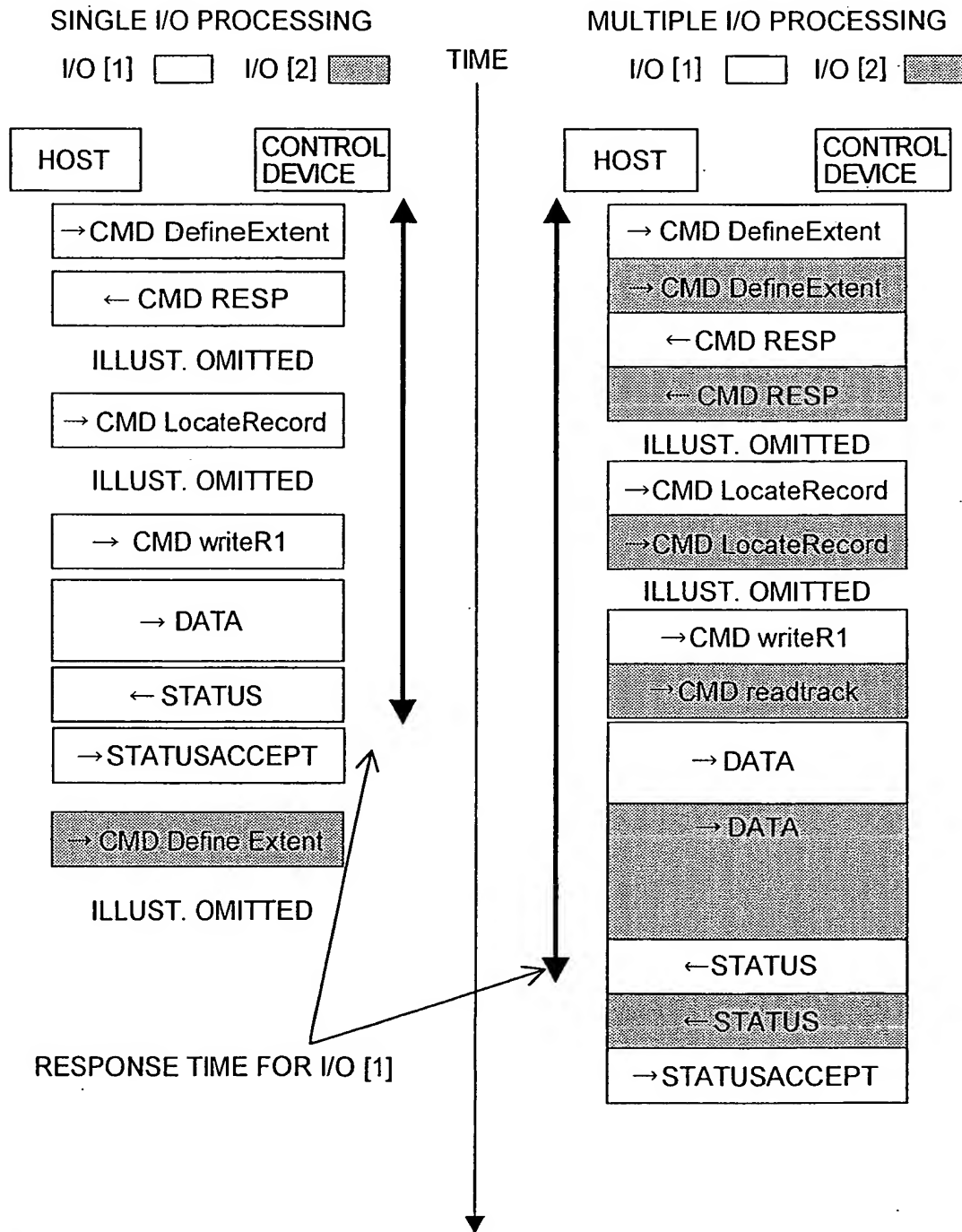


FIG. 3

CONSIDERATION (1) OF RESPONSE TIME WHEN PROCESSING A PLURALITY OF I/O REQUESTS (SINGLE I/O PROCESSING AND MULTIPLE I/O PROCESSING)



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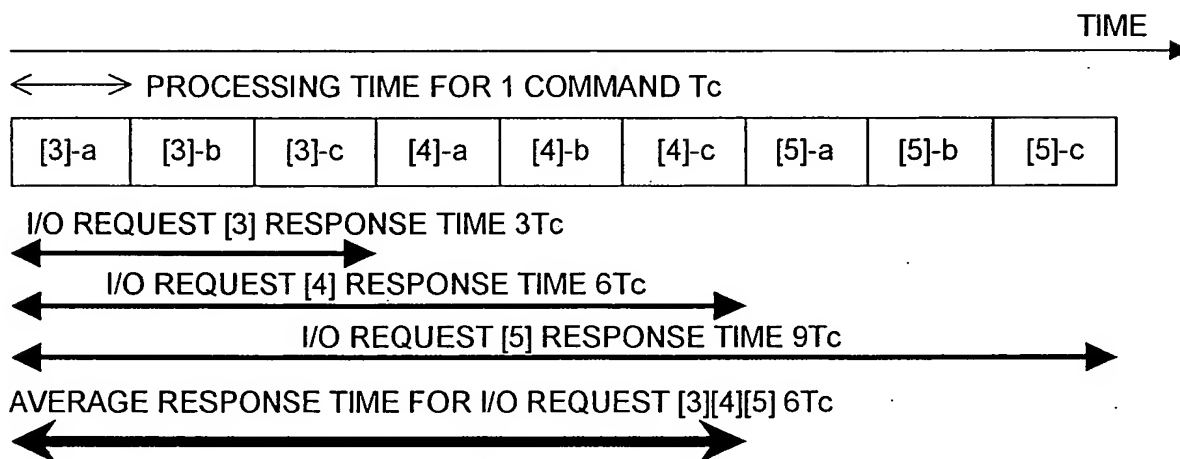
4 / 1 1

FIG. 4

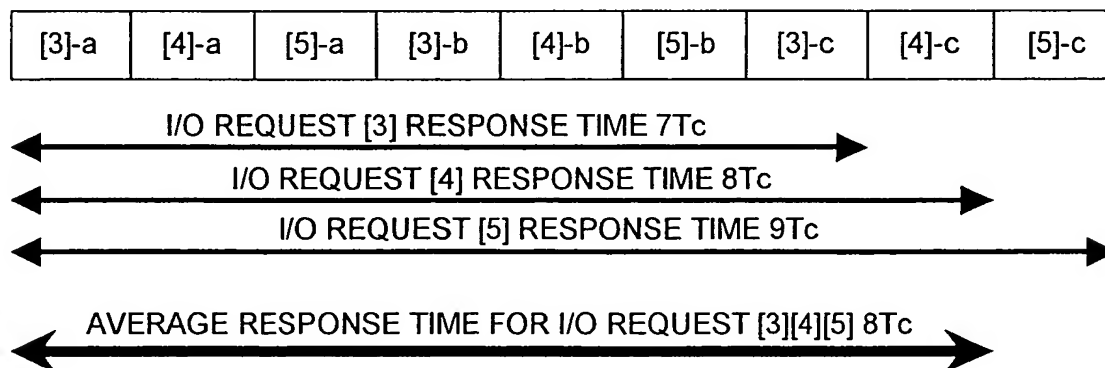
CONSIDERATION (2) OF RESPONSE TIME WHEN PROCESSING A PLURALITY OF I/O REQUESTS (SEQUENTIAL PROCESSING AND MULTIPLE PROCESSING)

I/O REQUEST [3]	COMMAND [3]-a	COMMAND [3]-b	COMMAND [3]-c
I/O REQUEST [4]	COMMAND [4]-a	COMMAND [4]-b	COMMAND [4]-c
I/O REQUEST [5]	COMMAND [5]-a	COMMAND [5]-b	COMMAND [5]-c

CASE 3-A: SEQUENTIAL PROCESSING FOR EACH I/O REQUEST



CASE 3-B MIXED PROCESSING OF A PLURALITY OF I/O COMMANDS



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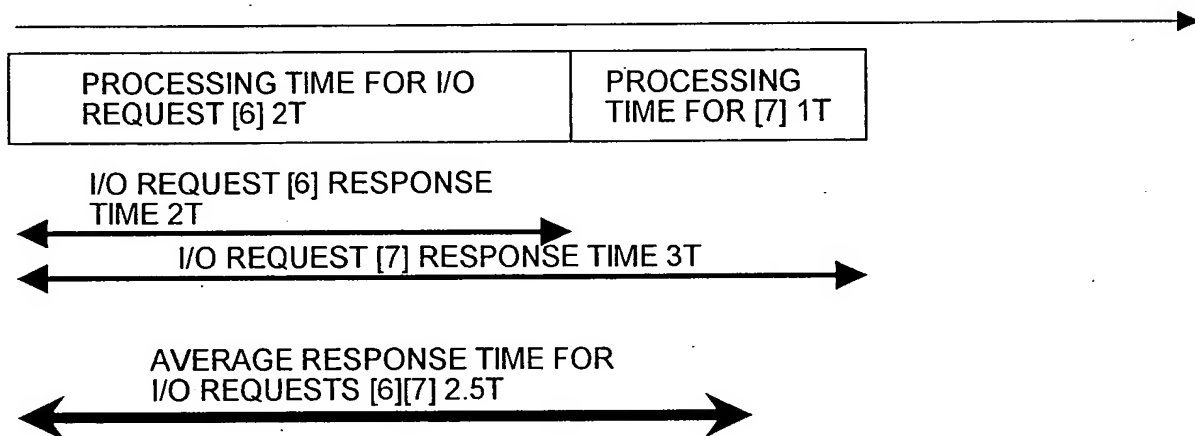
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FIG. 5

CONSIDERATION (2) OF RESPONSE TIME FOR PLURALITY OF I/O REQUESTS
(PROCESSING SEQUENCE)TIME TAKEN TO PROCESS I/O REQUEST [6] $2T$ TIME TAKEN TO PROCESS I/O REQUEST [7] $1T$

CASE 4-A: PROCESSED IN SEQUENCE I/O REQUEST [6][7]



CASE 4-B: PROCESSING IN SEQUENCE I/O REQUEST [6][7]

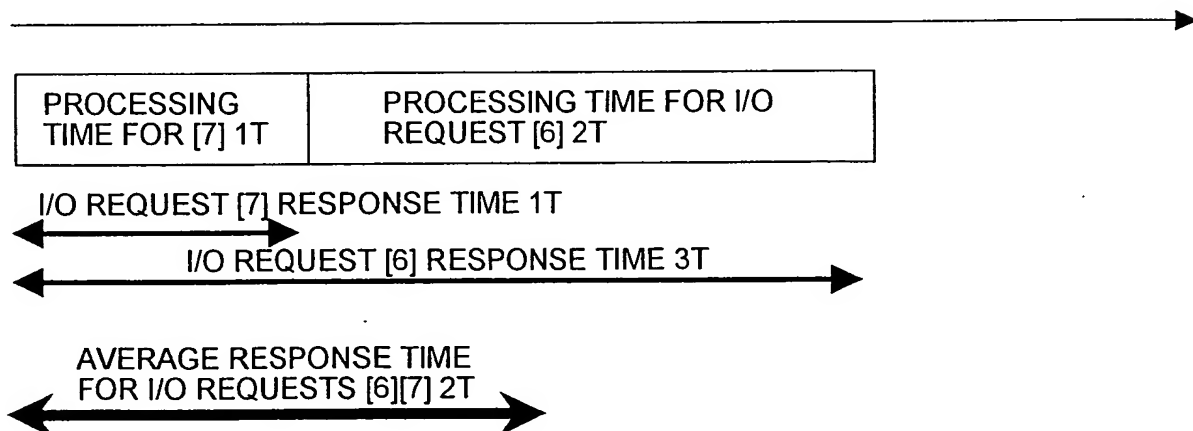


FIG. 6

TABLE SPECIFICATIONS IN SHARED MEMORY 106

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COMMAND PROCESSING TIME	
COMMAND TYPE	EXPECTED PROCESSING TIME (μ sec)
COMMAND [1]	T1
COMMAND [2]	T2
COMMAND [3]	T3
.	.
.	.
.	.
COMMAND n	Tn

1060A

DATA TRANSFER PROCESSING TIME		
TRANSFER TYPE / TRANSFER LENGTH (byte)		EXPECTED PROCESSING TIME (μ sec)
READ PROCESSING	DATA LENGTH a	Ta
	DATA LENGTH b	Tb
	.	.
	.	.
	.	.
WRITE PROCESSING		Tx
	DATA LENGTH a	Ta
	DATA LENGTH b	Tb
	.	.
	.	.
	DATA LENGTH x	Tx

1060B

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FIG. 7

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I/O REQUEST BUFFER					
I/O REQUEST 1	I/O REQUEST 2	I/O REQUEST 3	I/O REQUEST 4		I/O REQUEST N
EXECUTION SEQUENCE INFORMATION	EXECUTION SEQUENCE INFORMATION	EXECUTION SEQUENCE INFORMATION	EXECUTION SEQUENCE INFORMATION		EXECUTION SEQUENCE INFORMATION
COMMAND a	COMMAND a	COMMAND a	-		-
DATA a	DATA a	DATA a	-		-
COMMAND b	COMMAND b	COMMAND b	-		-
DATA b	DATA b	DATA b	-		-
COMMAND c	-	COMMAND c	-		-
DATA c-1	-	DATA c-1	-		-
DATA c-2	-	DATA c-2	-		-
DATA c-3	-	-	-		-
-	-	-	-		-
-	-	-	-		-
-	-	-	-		-

NUMBER OF I/O REGISTERED

FIG. 8

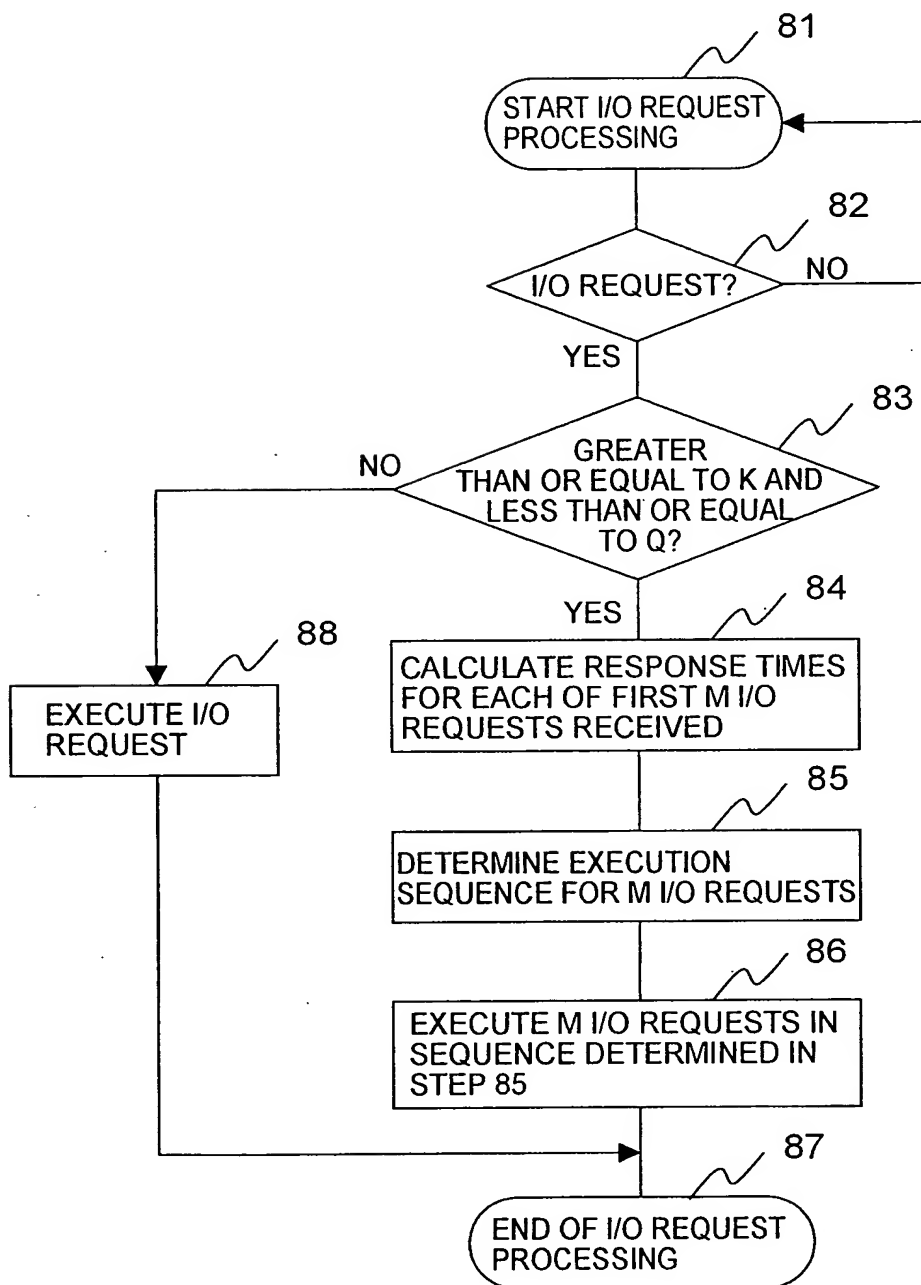


FIG. 9

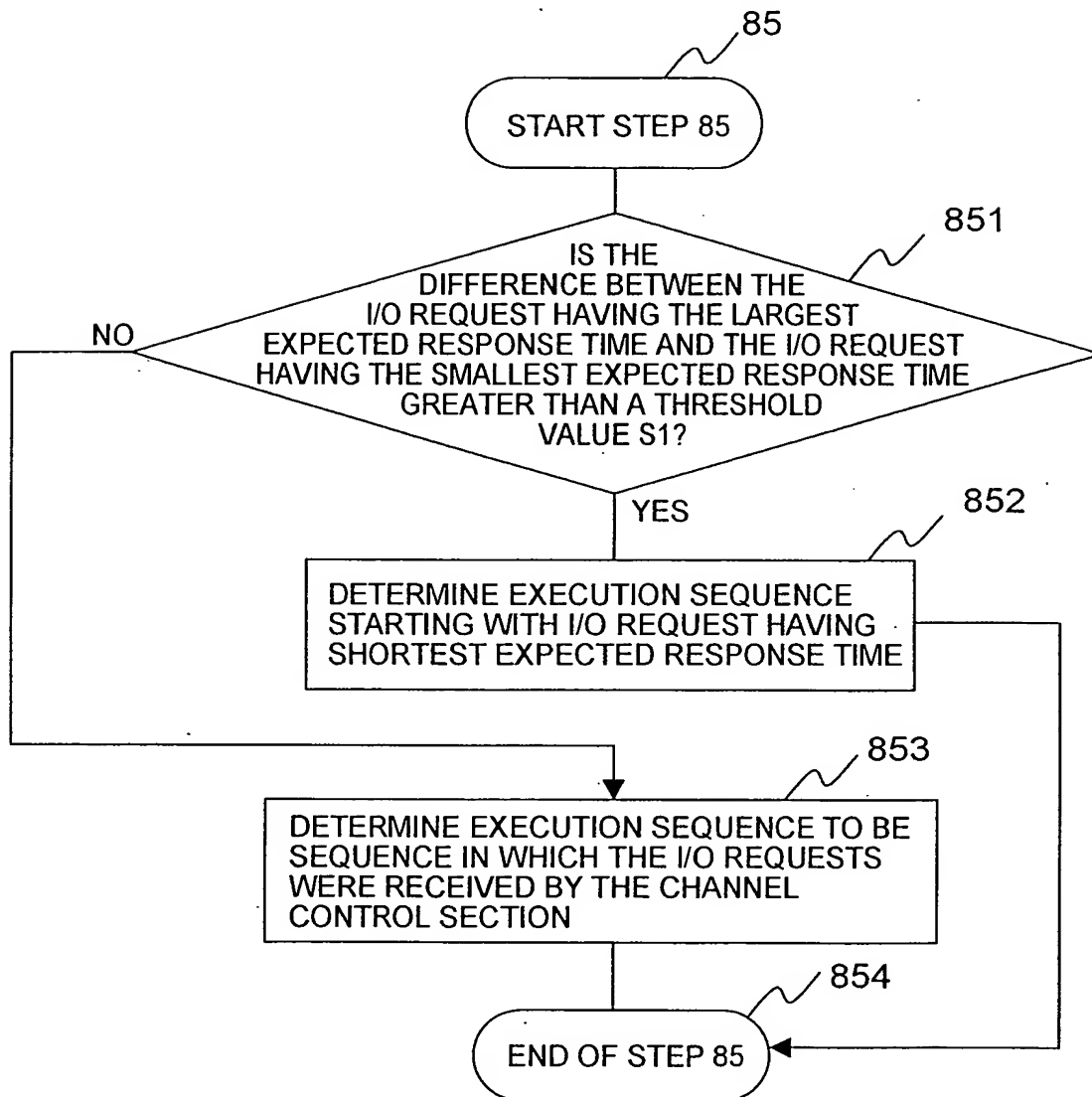


FIG. 10

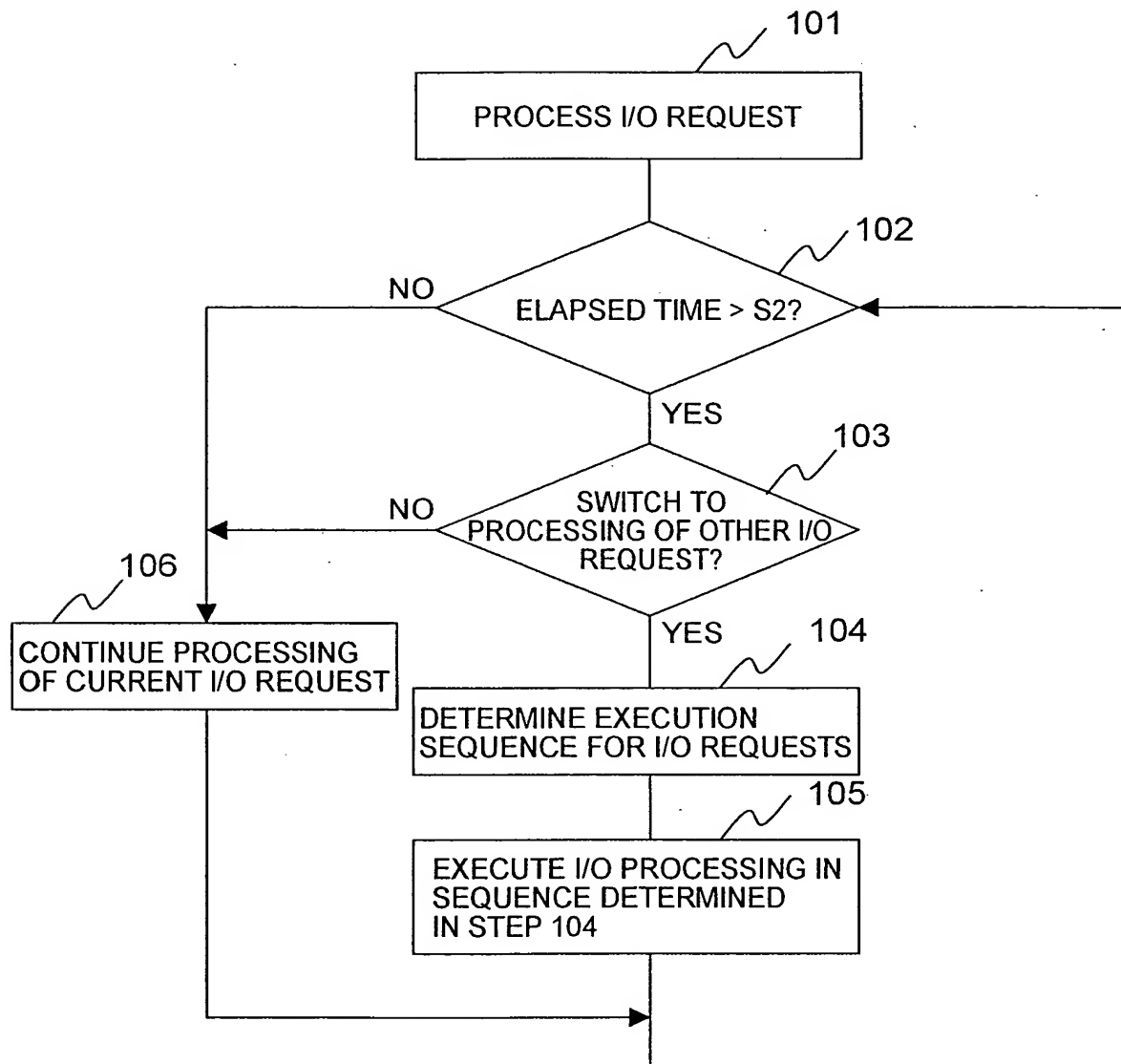


FIG. 11

